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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/752,898	12/29/2000	Stephen Mark Huffman	HUFFMAN-1-2	9625

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OFFICE OF THE ASSOC. GEN. COUNSEL (IP & T)
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EXAMINER	
NGUYEN, HAI V	
ART UNIT	PAPER NUMBER
2142	2

DATE MAILED: 05/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

ARC1

Office Action Summary	Application No.	Applicant(s)
	09/752,898	HUFFMAN ET AL.
	Examiner	Art Unit
	Hai V. Nguyen	2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 December 2000*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

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DETAILED ACTION

1. This Office action is in response to the application filed on 29 December 2000.

2. Claims 1-11 are presented for examination.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102(e) that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-11 are rejected under 35 U.S.C. 102(e) as being anticipated by **Anderson** et al. US patent no. **6,684,250 B2**.

5. As to claim 1, Anderson teaches substantially the invention as claimed, including a method for geolocating network equipment *(networked entity)* associated with a logical network address on a communications network, comprising the steps of:

measuring network latency from a plurality of network stations to a plurality of network endpoints of known physical location by pinging *(tracerouting)* said network endpoints from said network stations multiple times over a calibration period *(col. 54, lines 5-18)*,

determining round-trip propagation times between each of said network stations and each of said network endpoints over the calibration period from said pinging, and

setting the network latency for each combination of said network stations and :said network endpoints to the corresponding minimum round-trip propagation time determined for each of said combination of said network stations and said network endpoints *(Abstract, col. 4, line 23 – col. 5, line 50)*;

measuring the network latency from each of said network stations to said network equipment by pinging said network equipment from said network stations, determining the minimum round-trip propagation time between each of said network stations and said network equipment, and setting the network latency between each of said network stations and said network equipment to the corresponding minimum round-trip propagation time determined *(Abstract, col. 4, line 23 – col. 5, line 50; col. 25, lines 1 - 67)*;

for each of said network endpoints arranging the network latency from the network endpoint to each of said network stations in turn, in a particular order, as vector elements in an endpoint vector *(Abstract, col. 4, line 23 – col. 5, line 50; col. 25, lines 1 - 67)*;

arranging the network latency from said network equipment to each of said network stations in turn, in said particular order, as vector elements *(coordinates)* in a network equipment vector *(Abstract, col. 4, line 23 – col. 5, line 50; col. 25, lines 1 – 67; col. 53, line 32 – col. 54, line 18)*;

determining a distance between the network equipment vector and each of the endpoint vectors *(Abstract, col. 4, line 23 – col. 5, line 50; col. 25, lines 1 – 67; col. 53, line 32 – col. 54, line 18; col. 34, line 61 – col. 35, line 16)*; and

identifying the physical location of the network equipment as proximate to said known physical location of the network endpoint corresponding to the endpoint vector having said distance to the network equipment vector not greater than the distance from any other of the endpoint vectors to the target equipment vector *(Abstract, col. 4, line 23 – col. 5, line 50; col. 25, lines 1 – 67; col. 45, lines 10-29; col. 53, line 32 – col. 54, line 18)*.

6. As to claim 2, Anderson teaches a method for verifying that the geolocation of network equipment associated with a logical network address on a communications network is consistent with network equipments associated with vetted geolocations *(col. 22, lines 5-13)*, comprising the steps of:

measuring a network latency from a plurality of network stations to at least one piece of network equipment associated with vetted geolocations by pinging each of said network equipments associated with vetted geolocations from said network stations multiple times over a calibration period,

determining round-trip propagation times between each of said network stations and each of said network equipments associated with vetted geolocations over the calibration period from said pinging, and

setting the network latency for each combination of said network stations and said network equipments associated with vetted geolocations to the corresponding minimum round-trip propagation time determined for each of said combination of said network stations and said network equipments associated with vetted geolocations *(Abstract,*

col. 4, line 23 – col. 5, line 50; col. 17, line 42 – col. 18, line 18; col. 25, lines 1 – 67; col. 45, lines 10-29; col. 53, line 32 – col. 54, line 18);

measuring the network latency from each of said network stations to said network equipment by pinging said network equipment from said network stations, determining the minimum round-trip propagation time between each of said network stations and said network equipment, and

setting the network latency between each of said network stations and said network equipment to the corresponding minimum round-trip propagation time determined *(Abstract, col. 4, line 23 – col. 5, line 50; col. 17, line 42 – col. 18, line 18; col. 25, lines 1 – 67; col. 45, lines 10-29; col. 53, line 32 – col. 54, line 18)*;

for each of said network equipments associated with vetted geolocations arranging the network latency from each of said network equipments associated with vetted geolocations to each of said network stations in turn, in a particular order, as vector elements in a vetted equipment vector *(Abstract, col. 4, line 23 – col. 5, line 50; col. 17, line 42 – col. 18, line 18; col. 25, lines 1 – 67; col. 45, lines 10-29; col. 53, line 32 – col. 54, line 18)*;

arranging the network latency from said network equipment to each of said network stations in turn, in said particular order, as vector elements in a network equipment vector*(Abstract, col. 4, line 23 – col. 5, line 50; col. 17, line 42 – col. 18, line 18; col. 25, lines 1 – 67; col. 45, lines 10-29; col. 53, line 32 – col. 54, line 18)*;

determining a distance between the network equipment vector and each of the vetted equipment vectors *(Abstract, col. 4, line 23 – col. 5, line 50; col. 17, line 42 – col.*

18, line 18; col. 25, lines 1 – 67; col. 45, lines 10-29; col. 53, line 32 – col. 54, line 18); and

determining if the physical location of the network equipment is proximate to one of said network equipments associated with vetted geolocations *(Abstract, col. 4, line 23 – col. 5, line 50; col. 17, line 42 – col. 18, line 18; col. 25, lines 1 – 67; col. 45, lines 10-29; col. 53, line 32 – col. 54, line 18).*

7. As to claim 3, Anderson teaches a method for geolocating network equipment associated with a logical network address on a communications network as recited in claim 1, further comprising the additional step of determining if said distance to the network equipment vector not greater than the distance from any other of the endpoint vectors to the target equipment vector is within a user defined threshold *(Abstract, col. 4, line 23 – col. 5, line 50; col. 17, line 42 – col. 18, line 18; col. 21, line 15 – col. 22, line 13; col. 25, lines 1 – 67; col. 45, lines 10-29; col. 53, line 32 – col. 54, line 18).*

8. As to claim 4, Anderson teaches, wherein said steps of:

measuring a network latency from a plurality of network stations to a plurality of network endpoints of known physical location *(Abstract, col. 4, line 23 – col. 5, line 50; col. 17, line 42 – col. 18, line 18; col. 21, line 15 – col. 22, line 13; col. 25, lines 1 – 67; col. 45, lines 10-29; col. 53, line 32 – col. 54, line 18)*;

measuring the network latency for each of said network stations to said network equipment *(Abstract, col. 4, line 23 – col. 5, line 50; col. 17, line 42 – col. 18, line 18; col. 21, line 15 – col. 22, line 13; col. 25, lines 1 – 67; col. 45, lines 10-29; col. 53, line 32 – col. 54, line 18)*.;

for each of said network endpoints arranging the network latency from the network endpoint to each of said network stations in turn, in a particular order, as vector elements in an endpoint vector *(Abstract, col. 4, line 23 – col. 5, line 50; col. 17, line 42 – col. 18, line 18; col. 21, line 15 – col. 22, line 13; col. 25, lines 1 – 67; col. 45, lines 10-29; col. 53, line 32 – col. 54, line 18)*;

arranging the network latency from said network equipment to each of said network stations in turn, in said particular order, as vector elements in a network equipment vector *(Abstract, col. 4, line 23 – col. 5, line 50; col. 17, line 42 – col. 18, line 18; col. 21, line 15 – col. 22, line 13; col. 25, lines 1 – 67; col. 45, lines 10-29; col. 53, line 32 – col. 54, line 18)*; and

determining a distance between the network equipment vector and each of the endpoint vectors *(Abstract, col. 4, line 23 – col. 5, line 50; col. 17, line 42 – col. 18, line 18; col. 21, line 15 – col. 22, line 13; col. 25, lines 1 – 67; col. 45, lines 10-29; col. 53, line 32 – col. 54, line 18)* ;

are repeated in iteration using additional of said network endpoints until said distance to the network equipment vector not greater than the distance from any other of the endpoint vectors to the target equipment vector is within said user defined threshold *(Abstract, col. 4, line 23 – col. 5, line 50; col. 17, line 42 – col. 18, line 18; col. 21, line 15 – col. 22, line 13; col. 25, lines 1 – 67; col. 45, lines 10-29; col. 53, line 32 – col. 54, line 18)*..

9. As to claim 5, Anderson teaches, wherein said steps of:

measuring a network latency from a plurality of network stations to a plurality of network endpoints of known physical location *(Abstract, col. 4, line 23 – col. 5, line 50; col. 17, line 42 – col. 18, line 18; col. 21, line 15 – col. 22, line 13; col. 25, lines 1 – 67; col. 45, lines 10-29; col. 53, line 32 – col. 54, line 18)*;

measuring the network latency for each of said network stations to said network equipment *(Abstract, col. 4, line 23 – col. 5, line 50; col. 17, line 42 – col. 18, line 18; col. 21, line 15 – col. 22, line 13; col. 25, lines 1 – 67; col. 45, lines 10-29; col. 53, line 32 – col. 54, line 18)*;

for each of said network endpoints arranging the network latency from the network endpoint to each of said network stations in turn, in a particular order, as vector elements in an endpoint vector *(Abstract, col. 4, line 23 – col. 5, line 50; col. 17, line 42 – col. 18, line 18; col. 21, line 15 – col. 22, line 13; col. 25, lines 1 – 67; col. 45, lines 10-29; col. 53, line 32 – col. 54, line 18)*;

arranging the network latency from said network equipment to each of said network stations in turn, in said particular order, as vector elements in a network equipment vector *(Abstract, col. 4, line 23 – col. 5, line 50; col. 17, line 42 – col. 18, line 18; col. 21, line 15 – col. 22, line 13; col. 25, lines 1 – 67; col. 45, lines 10-29; col. 53, line 32 – col. 54, line 18)*; and

determining a distance between the network equipment vector and each of the endpoint vectors; are repeated in iteration using a different set of said network endpoints until said distance to the network equipment vector not greater than the distance from any other of the endpoint: vectors to the target equipment vector is within

said user defined threshold *(Abstract, col. 4, line 23 – col. 5, line 50; col. 17, line 42 – col. 18, line 18; col. 21, line 15 – col. 22, line 13; col. 25, lines 1 – 67; col. 45, lines 10-29; col. 53, line 32 – col. 54, line 18)*.

10. As to claim 6, Anderson teaches, wherein said steps of:

measuring a network latency from a plurality of network stations to a plurality of network endpoints of known physical location *(Abstract, col. 4, line 23 – col. 5, line 50; col. 17, line 42 – col. 18, line 18; col. 21, line 15 – col. 22, line 13; col. 25, lines 1 – 67; col. 45, lines 10-29; col. 53, line 32 – col. 54, line 18)*;

for each of said network endpoints arranging the network latency from the network endpoint to each of said network stations in turn, in a particular order, as vector elements in an endpoint vector *(Abstract, col. 4, line 23 – col. 5, line 50; col. 17, line 42 – col. 18, line 18; col. 21, line 15 – col. 22, line 13; col. 25, lines 1 – 67; col. 45, lines 10-29; col. 53, line 32 – col. 54, line 18)*;

arranging the network latency from said network equipment to each of said network stations in turn, in said particular order, as vector elements in a network equipment vector *(Abstract, col. 4, line 23 – col. 5, line 50; col. 17, line 42 – col. 18, line 18; col. 21, line 15 – col. 22, line 13; col. 25, lines 1 – 67; col. 45, lines 10-29; col. 53, line 32 – col. 54, line 18)*; and

determining a distance between the network equipment vector and each of the endpoint vectors *(Abstract, col. 4, line 23 – col. 5, line 50; col. 17, line 42 – col. 18, line 18; col. 21, line 15 – col. 22, line 13; col. 25, lines 1 – 67; col. 45, lines 10-29; col. 53, line 32 – col. 54, line 18)*;

11. are repeated in iteration until said distance to the network equipment vector not greater than the distance from any other of the endpoint vectors to the target equipment vector is within said user defined threshold.

12. As to claim 7, Anderson teaches, wherein said steps of:

measuring the network latency for each of said network stations to said network equipment *(Abstract, col. 4, line 23 – col. 5, line 50; col. 17, line 42 – col. 18, line 18; col. 21, line 15 – col. 22, line 13; col. 25, lines 1 – 67; col. 45, lines 10-29; col. 53, line 32 – col. 54, line 18)*;

arranging the network latency from said network equipment to each of said network stations in turn, in said particular order, as vector elements in a network equipment vector *(Abstract, col. 4, line 23 – col. 5, line 50; col. 17, line 42 – col. 18, line 18; col. 21, line 15 – col. 22, line 13; col. 25, lines 1 – 67; col. 45, lines 10-29; col. 53, line 32 – col. 54, line 18)*; and

determining a distance between the network equipment vector and each of the endpoint vectors *(Abstract, col. 4, line 23 – col. 5, line 50; col. 17, line 42 – col. 18, line 18; col. 21, line 15 – col. 22, line 13; col. 25, lines 1 – 67; col. 45, lines 10-29; col. 53, line 32 – col. 54, line 18)*;

are repeated in iteration until said distance to the network equipment vector not greater than the distance from any other of the endpoint vectors to the target equipment vector is within said user defined threshold *(Abstract, col. 4, line 23 – col. 5, line 50; col. 17, line 42 – col. 18, line 18; col. 21, line 15 – col. 22, line 13; col. 25, lines 1 – 67; col. 45, lines 10-29; col. 53, line 32 – col. 54, line 18)*.

13. As to claim 8, Anderson teaches, wherein said calibration period extends to all previous measuring of said network latency *(Abstract, col. 4, line 23 – col. 5, line 50; col. 17, line 42 – col. 18, line 18; col. 21, line 15 – col. 22, line 13; col. 25, lines 1 – 67; col. 45, lines 10-29; col. 53, line 32 – col. 54, line 18)*.

14. As to claim 9, Anderson teaches, wherein said calibration period extends back only a user-determined amount of time *(Abstract, col. 4, line 23 – col. 5, line 50; col. 17, line 42 – col. 18, line 18; col. 53, line 32 – col. 54, line 18)*.

15. As to claim 10, Anderson teaches, wherein said communications network is the Internet (*col. 21, line 15 – col. 22, line 13)*.

16. As to claim 11, Anderson teaches, wherein said steps of:

measuring a network latency from a plurality of network stations to a plurality of network endpoints of known physical location *(Abstract, col. 4, line 23 – col. 5, line 50; col. 17, line 42 – col. 18, line 18; col. 21, line 15 – col. 22, line 13; col. 25, lines 1 – 67; col. 45, lines 10-29; col. 53, line 32 – col. 54, line 18)*.; and

for each of said network endpoints arranging the network latency from the network endpoint to each of said network stations in turn, in a particular order, as vector elements in an endpoint vector; are performed based on particular sets of user defined external factors and also further comprising the additional step of saving said arranged endpoint vector *(Abstract, col. 4, line 23 – col. 5, line 50; col. 17, line 42 – col. 18, line 18; col. 21, line 15 – col. 22, line 13; col. 25, lines 1 – 67; col. 45, lines 10-29; col. 53, line 32 – col. 54, line 18)*.

17. Further references of interest are cited on Form PTO-892, which is an attachment to this action.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai V. Nguyen whose telephone number is 703-306-0276. The examiner can normally be reached on 6:00-3:30 Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Harvey can be reached on 703-305-9705. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jack Harvey

JACK B. HARVEY
SUPERVISORY PATENT EXAMINER

Hai V. Nguyen
Examiner
Art Unit 2142

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